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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/500,111	05/27/2005	Naosuke Komoto	254918US0PCT	7908

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EXAMINER

CHOI, LING SIU

ART UNIT PAPER NUMBER

1713

DATE MAILED: 07/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/500,111	<b>Applicant(s)</b> KOMOTO ET AL.	
	<b>Examiner</b> Ling-Siu Choi	<b>Art Unit</b> 1713	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>12/29/05, 6/25/04</u> . | 6) <input type="checkbox"/> Other: ____  |

### **DETAILED ACTION**

1. This Application is a 371 of PCT/JP02/13345, filed December 20, 2002. Claims 1-10 are now pending, wherein claims 1-3 are drawn to a binder resin composition; claims 4-5 are drawn to a method to produce the binder resin composition; claims 6-10 are drawn to a paint, a printing ink, an adhesive, a heat sealing agent, and a primer, respectively.

### ***Claim Objections***

2. Claims 1-10 are objected to because of the following informalities:

(a) claim 1, line 1, "A binder resin composition characterized by containing" is suggested to be changed to --A binder resin composition containing--;

(b) claim 1, line 2, "chlorinated propylenic random copolymer" is suggested to be changed to --a chlorinated propylenic random copolymer--;

(c) claim 1, line 5, "metallocene type catalyst" is suggested to be changed to --metallocene catalyst--;

(d) claim 1, lines 6-7, "stabilizer and organic solvent" is suggested to be changed to --a stabilizer and an organic solvent--;

(e) claim 2, line 4, ", graft polymerized" is suggested to be changed to -- : propylenic random copolymer graft polymerized--;

(f) claim 4, line 4, "by differential" is suggested to be changed to --by differential--;

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(g) claim 4, line 6, "metallocene type catalyst" is suggested to be changed to –  
metallocene catalyst--;

(h) claim 5, lines 3-4, "random copolymer graft polymerized with" is suggested to  
be changed to --random copolymer: propylenic random copolymer graft polymerized  
with--;

(i) Claims 6-10 are objected to under 37 CFR 1.75(c) as being in improper form  
because of a multiple dependent claim 3 on which they depend. See MPEP

§ 608.01(n). Accordingly, the claims 6-10 have not been further treated on the merits..

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

**3. The following is a quotation of the second paragraph of 35 U.S.C. 112:**

**The specification shall conclude with one or more claims particularly pointing  
out and distinctly claiming the subject matter which the applicant regards as  
his invention.**

4. Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being  
indefinite for failing to particularly point out and distinctly claim the subject matter which  
applicant regards as the invention.

Claim 1, line 6, the recitation "10 to 40% by weight" causes indefiniteness  
because there is no base for the weight % to be cited.

Claim 2, lines 5-6; line 9, the recitation "0 to 20% by weight" causes  
indefiniteness because there is no base for the weight % to be cited.

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Claim 2, line 6-7; lines 7-8, the recitation "10 to 40% by weight" causes indefiniteness because there is no base for the weight % to be cited.

Claim 4, lines 7, the recitation "10 to 40% by weight" causes indefiniteness because there is no base for the weight % to be cited.

Claim 5, line 5; line 8, the recitation "0 to 20 % by weight" causes indefiniteness because there is no base for the weight % to be cited.

Claim 5, line 6; line 7, the recitation "10 to 40% by weight" causes indefiniteness because there is no base for the weight % to be cited.

### ***Claim Analysis***

#### 5. Summary of claim1:

A binder resin composition containing	
A	a <b>chlorinated propylenic random copolymer</b> having weight average molecular weight of 3,000 to 250,000 wherein propylenic random copolymer obtained by copolymerizing propylene with other $\alpha$ -olefin in the coexistence of metallocene type catalyst is chlorinated to chlorine content of 10-40% by weight
B	a stabilizer
C	an organic solvent

claim 2	<b>chlorinated propylenic random copolymer</b> is a carboxyl group-containing chlorinated propylenic random copolymer having weight average molecular weight of 3,000 to 220,000
claim 4	<b>propylenic random copolymer</b> with melting point measured by DSC of 115-165°C

***Claim Rejections***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

***Claim Rejections - 35 USC § 102***

8. Claims 1-2 and 6-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Urata et al. (US 6,586,525 B1).

“propylenic random copolymer obtained by copolymerization propylene with other  $\alpha$ -olefin in the coexistence of metallocene type catalyst” does not carry the patentable weight because the present claims are drawn to a product. The case law held that “[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself.” *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964,966 (Fed.Cir. 1985).

Urata et al. disclose a binder resin comprising carboxyl group-containing chlorinated polyolefin and a stabilizer, wherein the polyolefin can be a propylene- $\alpha$ -olefin copolymer having weight average molecular weight of 10,000 to 150,000; the carboxyl group-containing chlorinated polyolefin has a chlorine content from 10 to 30 wt%; the unsaturated carboxylic acid monomer used to introduce carboxyl group to the polyolefin is maleic acid, maleic anhydride, fumaric acid in an amount of 1 to 10 wt% to polyolefin; and the stabilizer is an epoxy compound (abstract; col. 2, lines 53-67; col. 3, lines 1-4, 20-31, and 39-49; col. 5, line 67; col. 6 line 1). Urata et al. further disclose that the carboxyl group-containing chlorinated polyolefin can be used in coating /spray painting, primer, ink, and adhesive (col. 5, lines 26-35). Urata et al. further disclose that the binder resin further comprises a surfactant (col. 6, lines 22-27).

9. Claims 1-2 and 6-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Ueda et al. (EP 1 065 245 A1).

Ueda et al. disclose a binder resin composition comprising carboxyl group-containing chlorinated polyolefin resin and an stabilizer, wherein the carboxyl group-containing chlorinated polyolefin has **chlorine content** of 0.1 to 40 wt%, grafting level of  $\alpha$ ,  $\beta$ -**unsaturated carboxylic acid and/or its acid anhydride** of 0.5 to 10 wt%, and **weight average molecular weight** of 30,000 to 220,000 and the stabilizer is an epoxy compound (abstract; [0030]-[0031]; [0041]-[0046]). Ueda et al. further disclose that the polyolefin is produced using metallocene compound and that "[i]t is possible to use syndiotactic polypropylene (SPP), propylene- $\alpha$ -olefin copolymer produced by using

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**metallocene catalyst** as a polymerization catalyst.....random copolymerizability is more excellent resulting in narrower composition distribution and wider range of copolymerization comonomer..." ([0011]-[0013]). Thus, the polyolefin can be the propylene- $\alpha$ -olefin copolymer having **random copolymerizability**. thus, the present claims are anticipated by the disclosure of Ueda et al.

***Claim Rejections - 35 USC § 102/103***

10. Claims 3-5 are rejected under 35 U.S.C. 102 (b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Urata et al. (US 6,586,525 B1).

The rejection is adequately set forth in the paragraph 8 and is incorporated herein by reference. However, Urata et al. are silent on the thermal properties of the polyolefin. In view of the substantial identical polyolefins to be used in the present claims and the disclosure of Urata et al., the polyolefin would possess the claimed thermal properties. Since the PTO does not have proper means to conduct experiments, the burden of proof is now shifted to applicants to show otherwise. *In re Best*, 562 F.2d 1252, 195 USPQ 430 (CCPA 1977); *In re Fitzgerald*, 205 USPQ 594 (CCPA 1980).

11. Claims 3-5 are rejected under 35 U.S.C. 102 (b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Ueda et al. (EP 1 065 245 A1).

The rejection is adequately set forth in the paragraph 9 and is incorporated



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herein by reference. However, Ueda et al. are silent on the thermal properties of the polyolefin. In view of the substantial identical polyolefins to be used in the present claims and the disclosure of Urata et al., the polyolefin would possess the claimed thermal properties. Since the PTO does not have proper means to conduct experiments, the burden of proof is now shifted to applicants to show otherwise. *In re Best*, 562 F.2d 1252, 195 USPQ 430 (CCPA 1977); *In re Fitzgerald*, 205 USPQ 594 (CCPA 1980).

### ***Conclusion***

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ling-Siu Choi whose telephone number is 571-272-1098.

If attempt to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reach on 571-272-1114.



**LING-SUI CHOI  
PRIMARY EXAMINER**

June 15, 2006